

ONTARIO VETERINARY COLLEGE
Project Proposal Form:
Summer Research Assistantship



ONTARIO
VETERINARY COLLEGE

1. BASIC INFORMATION

Advisor Name: John Barta

Department: Pathobiology

Proposed Start Date: 2019-05-01

CONTACT INFORMATION FOR STUDENT APPLICATIONS

Name: John Barta

Phone Extension: 54017

Email: jbarta@uoguelph.ca

2. DETAILS OF PROJECT

Title of Proposed Project:

Small Ruminant Coccidiosis Research

Outline of Proposed Research Project (please keep concise, approximately ½ page or less):

Coccidiosis caused by the protozoan parasite *Eimeria* is a highly prevalent parasitic disease in domestic small ruminants. This project involves the collection and analysis of fecal samples from domestic sheep and goats to evaluate the impact of coccidiosis on the small ruminant industry. The student will be working with the supervision of a senior graduate student to assist in both laboratory and field research. The field research component will include collection of fecal samples from small ruminants, maintaining collection records and assisting in moving animals. The laboratory research component will include using standard floating techniques to identify GI parasite eggs in fecal samples, standard laboratory cleaning and molecular work for DNA sequencing. Previous experience with large animals and understanding of basic molecular laboratory techniques (e.g. PCR) is preferred. There will be opportunities to work with various parasite specimens and learn new laboratory techniques. The student will be given an research project as their responsibility involving protozoan parasites in domestic or wild small ruminants to complete for presentation at the OVC CORE program and potential for future publication. Experience with large farm animals and a basic understanding of genetics, molecular biology and parasitology is preferred. This position is ideally suited for a senior undergraduate student or DVM student looking to gain experience with on farm animal handling and diagnostic parasitology.

3. AVAILABLE ASSISTANTSHIPS

Select assistantship most relevant to the proposed research project (multiple boxes may be checked).
Please note restrictions.

- Andrea Leger Dunbar Summer Research Assistantship:**
No restrictions

- James and Marjorie Pinkney Research Scholarship:**
Projects in *animal health and welfare*, restricted to veterinary students

- OVC Summer Research Studentship:**
Restricted to veterinary students

- Boehringer Ingelheim (previously Merial) Veterinary Scholars Program:**
Projects in *veterinary medicine*, restricted to veterinary students